

## **ECON 7590 - Econometrics**

Fall 2016, M & W, 11:50am - 1:10pm, Bldg. 73, Rm. 109

### *Instructor*

Dr. Haimanti Bhattacharya

Email: haimanti.bhattacharya@utah.edu

Office Hours: By Appointment

### *Course description*

The purpose of this course is to provide a graduate level introduction to mathematical statistics and linear regression for cross-section data analysis.

### *Suggested textbooks*

- George Casella and Roger Berger. Statistical Inference. 2nd Edition. ISBN 13: 978-0534243128.
- Jeffrey M Wooldridge. Econometric Analysis of Cross Section and Panel Data. 2nd Edition. ISBN-13: 978-0262232586.

### *Grading policy*

- 4 assignments each with 2.5% weight
- 2 exams each with 45% weight

### *Letter grade scale*

- $A \geq 93\%$ ,  $93\% > A- \geq 90\%$
- $90\% > B+ \geq 87\%$ ,  $87\% > B \geq 83\%$ ,  $83\% > B- \geq 80\%$
- $80\% > C+ \geq 77\%$ ,  $77\% > C \geq 73\%$ ,  $73\% > C- \geq 70\%$
- $70\% > D+ \geq 65\%$ ,  $65\% > D \geq 60\%$ ,  $60\% > D- \geq 50\%$
- $50\% > E$

## *Topics*

- Statistical theory
  - Probability theory
  - Distribution of random variables
  - Transformation of random variables
  - Moments of random variables
  - Common families of distributions
  - Properties of random sample
  - Point and interval estimation
  - Hypothesis testing
  
- Cross-section regression analysis
  - Classical linear regression model
  - Properties of OLS
  - Hypothesis testing
  - Qualitative explanatory variables
  - Multicollinearity
  - Heteroskedasticity
  - Specification issues

## *Notes*

- Late assignments lose points.
- The exams must be taken at the scheduled time. When a student has a legitimate (documented) reason for missing the first exam, the weight of the exam will be transferred to the second exam. Absolutely no make-up exams are given.
- Incompletes are not generally given for non-medical reasons.

- If you have any question regarding grading of an exam or assignment question, you must ask within a week from the day the grades are provided. No exceptions to this rule will be entertained.

#### *Americans with Disabilities Act (ADA) Statement*

The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations. All information in this course can be made available in alternative format with prior notification to the Center for Disability Services. ([www.hr.utah.edu/oeo/ada/guide/faculty/](http://www.hr.utah.edu/oeo/ada/guide/faculty/))

#### *Wellness Statement*

Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness - [www.wellness.utah.edu](http://www.wellness.utah.edu); 801-581-7776.